

## AMENDMENTS TO THE SPECIFICATION

Please amend the paragraphs beginning on page 4 following the subparagraph entitled "Brief Description of the Drawings", as follows:

### Brief Description of the Drawings

The present invention will now be described, by way of example, with reference to the accompanying drawings, in which: [[-]]

Figure 1<sub>1</sub> is a time diagram from which the different influence of a changing ambient temperature on the foam temperature and on the temperature of the electronic control and/or evaluation unit results;

Figure 2<sub>1</sub> is a circuit diagram of a Butterworth low-pass filter of the first order for the filtering of the output signal of the temperature sensor;

Figure 3<sub>1</sub> is a time diagram from which the respective time curve of the temperature measured via the temperature sensor, of the measured foam temperature and the output signal of the temperature sensor filtered by means of the Butterworth low-pass filter results; [[and]]

Figure 4<sub>1</sub> is a further time diagram in which the output signal of the filter and the output signal of the temperature sensor are again compared with one another;

Figure 5, is a broken view of an occupant recognition system in application within a passenger vehicle; and

Figure 6, is a schematic diagram of the occupant recognition system of  
Figure 5.

Please amend page 6, beginning at line 10, as follows:

The solution of the differential equation for the heat transfer provides

$$1) \quad T_{\text{ECU}} = T_{\infty} + (T_{\text{ECU}, t=0} - T_{\infty}) \cdot e^{-\frac{t}{\tau_{\text{ECU}}}}$$

$$2) \quad T_{\text{Foam}} = T_{\infty} + (T_{\text{Foam}, t=0} - T_{\infty}) \cdot e^{-\frac{t}{\tau_{\text{Foam}}}},$$

where the two time constants  $\tau_{\text{ECU}}$  and  $\tau_{\text{Foam}}$  for the electronic control and/or evaluation unit (ECU) and the foam (Foam) differ from one another. These time constants can, for example have the following values:

$$\tau_{\text{ECU}} \approx 10 \text{ min.}$$

$$\tau_{\text{Foam}} \approx 30 \text{ min.}$$

Please enter two new paragraphs beginning on page 8, line 13, as follows:

**(NEW)**

Figure 5 illustrates an occupant recognition system 12 installed within a passenger vehicle 14. A vehicle seat assembly 16, including a foam seat cushion 18 carried by a seat frame 20, is mounted to the vehicle floor 28 by intermediate posts 22. Posts 22 carry the vehicle seat 16 in a spaced relationship above the vehicle floor 28. A pressure sensor 24 is arranged directly beneath the seat foam 18 and includes an output 25 for connection to an electronic control unit and/or evaluation unit 26, which is affixed to the vehicle floor 28 directly beneath the seat 16. A temperature sensor 30, preferably comprising a thermistor, having an output 31 connected to the electronic control unit and/or evaluation unit 26 is located to sense ambient temperature within or near the electronic control unit and/or evaluation unit 26. Thus arranged, the temperature sensor is located at a distance from the pressure sensor 24 and foam cushion 18. The electronic control unit and/or evaluation unit 26 is connected to control a switch 32 operating an airbag 33 within vehicle 14.

Figure 6 illustrates the occupant recognition system 12 on an enlarged scale. The pressure sensor 24 includes a flexible sensor mat 34 filled with fluid 36. The electronic control unit and/or evaluation unit 26 and the temperature sensor 30 are disposed within a common housing 38.